



UNITED STATES PATENT AND TRADEMARK OFFICE

pen
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/790,571

03/01/2004

Philip Corbin III

FLUX 2004-1

9864

47842

7590

08/31/2006

EXAMINER

LE, DANG D

THE MILLER LAW OFFICES, PLC
801 BRICKELL AVE
SUITE 900
MIAMI, FL 33131

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,571

Applicant(s)

CORBIN ET AL.

Examiner

Dang D. Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment after Final filed on 6/6/06 has been entered. In addition, claims 14 and 29 depend on canceled claims. According to the applicant's instruction per telephone interview, claims 14 and 29 are canceled. Only claims 1 and 16 are pending.

Response to Arguments

2. Applicant's arguments filed 6/6/06 have been fully considered but they are not persuasive. Newly cited references show that iron is non-permanent magnetic material. See Huang et al. (6,906,517), column 3, lines 20-25 and Van Bijsterveld et al. (6,824,329), column 6, lines 29-32. As a result, the rejection is still deemed proper and repeated hereinafter.

3. Applicant's arguments with respect to claims 1 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masaki et al. (JP 02-074146) in view of Lehde (2,807,734).

Regarding claim 1, Masaki et al. shows an apparatus for transferring torque magnetically comprising:

- A primary torque driving rotary member (2) and a secondary driven rotary member (5);
- The primary rotary member axially overlapping said secondary rotary member (Figure 4);
- The secondary rotary member being surrounded by said primary member (Figure 4);
- The primary rotary member, and not the secondary rotary member, having permanent magnets (6) mounted on it;
- The secondary rotary member (5) having electro-conductive elements (4) and magnetically permeable materials (3, iron) but not having permanent magnets or other permanent magnetic elements (iron being non-permanent magnetic material);
- Said secondary rotary member axially overlapped by said primary rotating member (Figure 4);
- Said primary rotating member being connected to and driven by a torque producing device (not shown) and said secondary routing member being connected to a torque utilizing device (not shown) whereby rotation of the primary rotary member causes rotation of said secondary rotating member by some or all (all flux utilized in Figure 4) of the magnetic flux lines emanating from said permanent magnets mounted on said primary rotating member

cutting through the electro-conductive material on said secondary rotary member thereby generating torque and rotation in said secondary rotary member in relation to the percentage of the total area that said secondary rotary member is axially overlapped by said primary rotary member.

Masaki et al. does not show a means for varying said primary rotary member's axial position relative to said secondary rotating member being provided.

Lehde provides a means (21) for varying said primary (13) rotary member's axial position relative to said secondary rotating member for the purpose of changing the speed of the driven member (19).

Since Masaki et al. and Lehde are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a means for varying said primary rotary member's axial position relative to said secondary rotating member as taught by Lehde for the purpose discussed above.

Regarding claim 16, it is noted that Masaki et al. also provides the secondary rotary member with permanent magnets (6, Figures 1 and 3) and the primary member with electro-conductive elements (4) and magnetically permeable materials (3, iron) which is not permanent magnet or other permanent magnetic elements (iron being non-permanent magnetic material).

Claim Rejections - 35 USC § 103

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Denk et al. (5,292,284) in view of Lehde (2,807,734).

Regarding claim 1, Denk et al shows all of the limitations of the claimed invention in Figure 2 including the primary member having permanent magnets (22) and the secondary member having electro-conductive elements and magnetically permeable materials (14) but not magnets or permanent magnetic elements except for means for varying the primary rotary member's axial position relative to said secondary rotating member.

Lehde shows means (20-22) for varying the primary rotary member's axial position relative to said secondary rotating member for the purpose of controlling the torque.

Since Denk et al. and Lehde are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a means for varying said primary rotary member's axial position relative to said secondary rotating member as taught by Denk et al. for the purpose discussed above.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehde (2,807,734) in view of Murphy (3,860,064).

Regarding claim 16, Lehde shows all of the limitations of the claimed invention in Figure 1 including the secondary member having permanent magnets (14) and means (20-22) for varying the primary rotary member's axial position relative to said secondary

rotating member except for the primary member (19) having electro-conductive elements and magnetically permeable materials but not magnets or permanent magnetic elements.

Murphy shows either the primary member or secondary member (18 or 19) having electro-conductive elements and magnetically permeable materials but not magnets or permanent magnetic elements (column 1, line35-40) for the purpose of increasing the speed and reducing heat.

Since Lehde and Murphy are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use electro-conductive elements and magnetically permeable materials but not magnets or permanent magnetic elements in either the primary or secondary members as taught by Murphy for the purpose discussed above.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

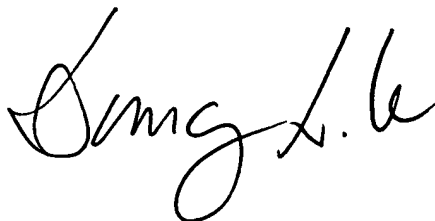
Information on How to Contact USPTO

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D. Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/25/06



DANG LE
PRIMARY EXAMINER